Receipt Inspection of Foods

Public Health Apprentice Course

Overview

- Guidance
- Inspection Considerations
- Thermometers
- Non-conformance Procedures

Guidance

- AFI 48-116, Food Safety Program
  - Approved sources
  - Assigns responsibilities
- U.S. Air Force Food Code
  - Food safety issues
  - Sanitation of carrier
- Joint Receipt Manual
  - Frequencies
  - Sample sizes

Guidance

- Contracts
  - DeCa (Commissary)
    - Indefinite Quantity Contracts (IQC)
    - Blanket Delivery Orders (BDO)
    - Resale Ordering Agreements (ROA)
    - Blanket Purchase Agreements (BPA)
  - Services (Dining Facility, MWR, Troop Issue)
    - Prime Vendor, BPA
  - AAFES (BX Food Court, Shoppettes)
    - Prime Vendor

A Note or Two about… Prime Vendors

- Takes advantage of modern commercial delivery systems…meaning???
- PH trains receipt managers to perform receipt inspections (5 inspection criteria)
  - Prime Vendor policy letter
- We're only a phone call away…
  - PH provides consultation and technical support on food safety

Guidance

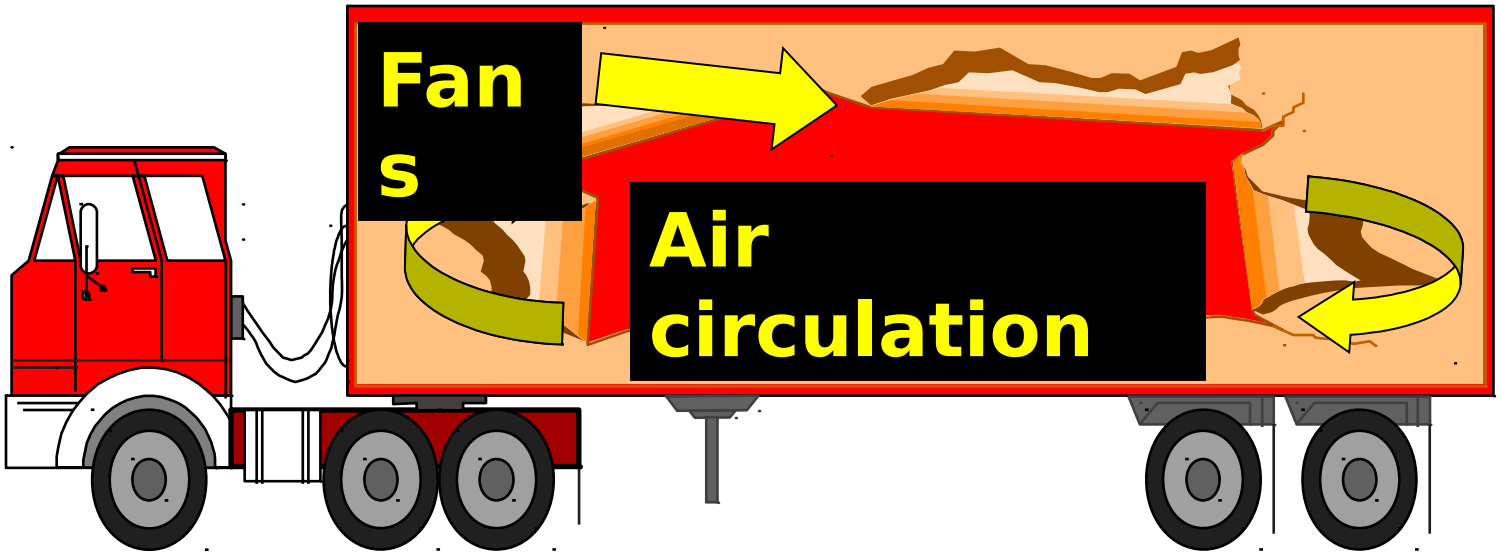
- Quality Assurance Provisions (QAPs)
  - DeCA's QAP's often used because they are convenient and comprehensive
    - They can be modified to fit specific needs of each BPA contract
  - PH coordinates with procurement officer to provide QAPs for the local contracts and to make sure food is from approved sources

Inspection Considerations

- Approved Sources
  - Federally inspected by USDA, USDC, FDA
  - Locally inspected by military dept(s)
  - Procured/processed sanitarily
- Sanitation of Carrier
- Integrity of Packing/Packaging
- Temperature(s)...

Inspection Considerations

- Temperature
  - Vehicle (ambient)

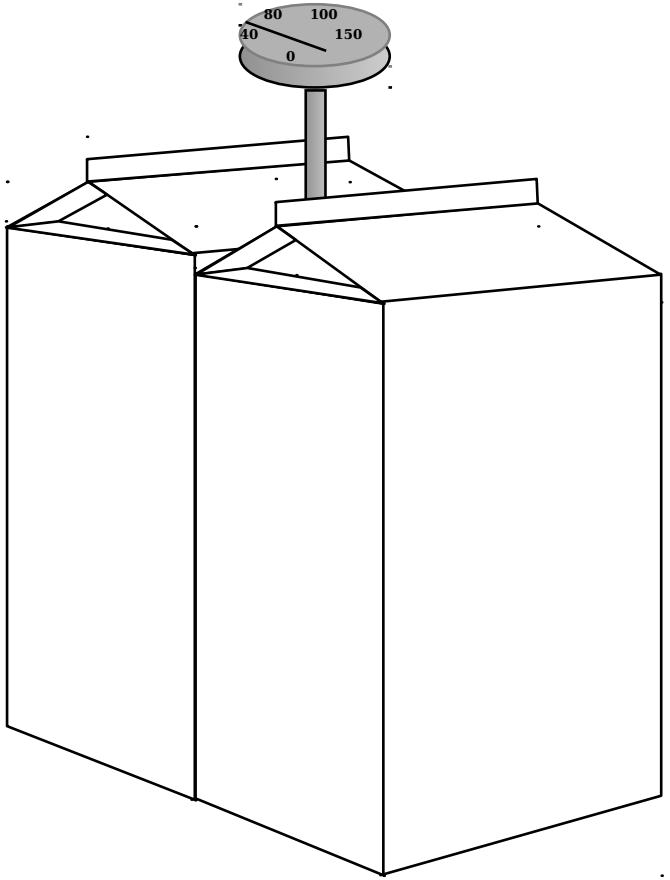


Why? Where? How?

Inspection Considerations

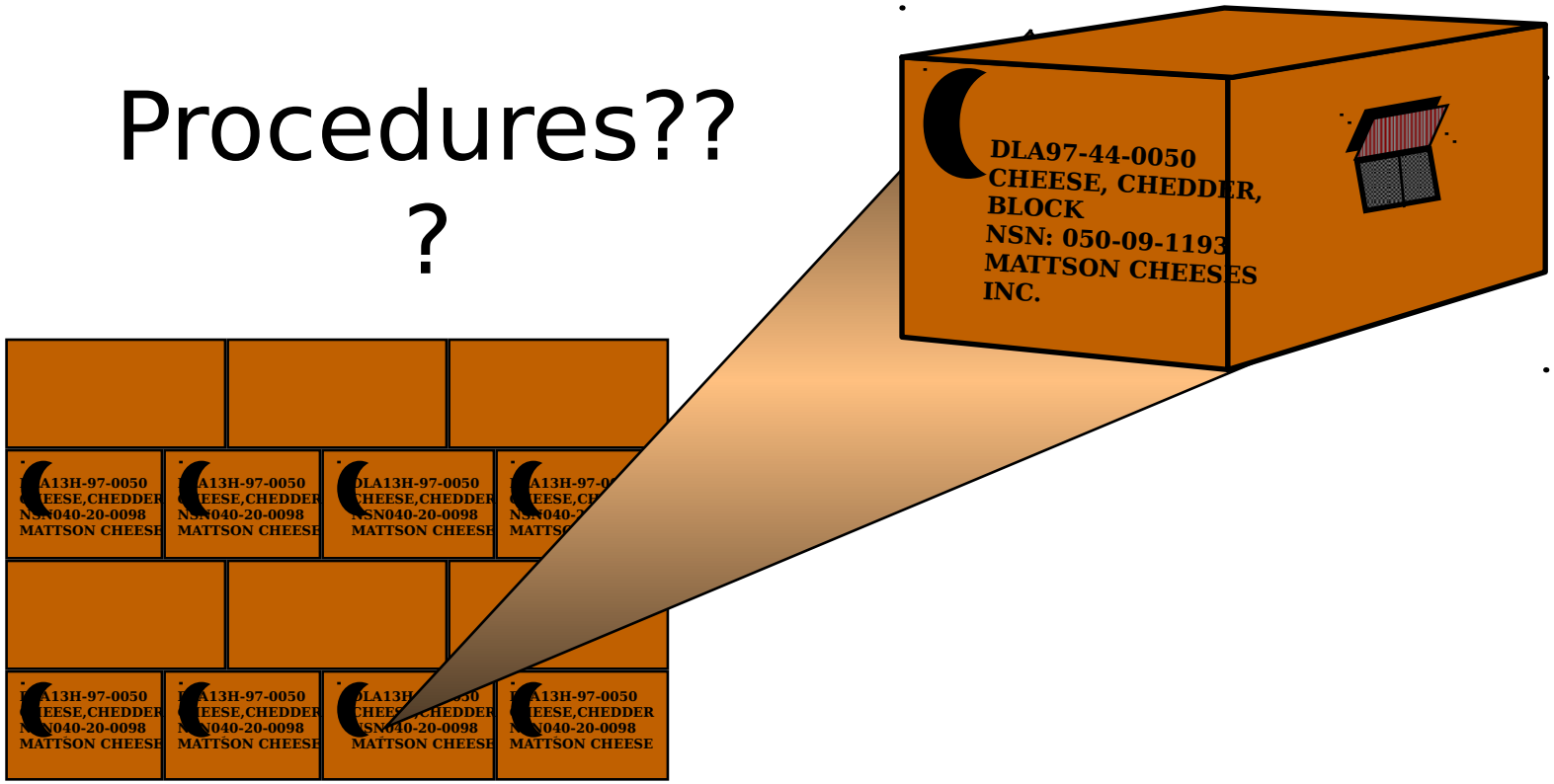
- Temperature
  - Product (Surface)

    Why take surface temps?
  - Procedures
    - Insert securely between 2 primary containers
    - Leave, read & record
    - Remove & sanitize



Surface Temperatures
for cased/palletized products

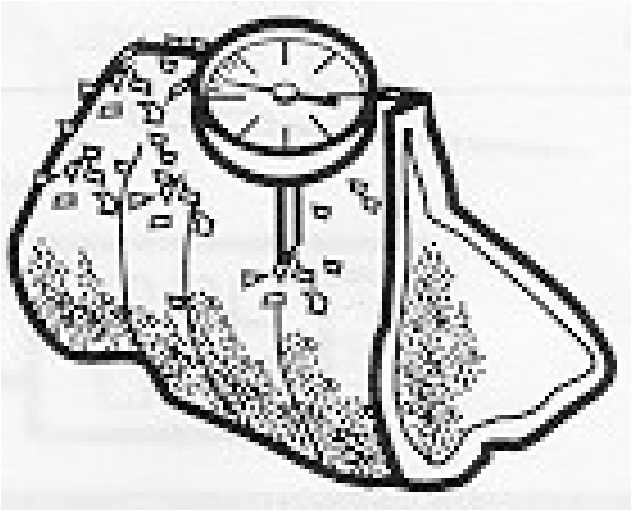
Procedures??
?



Inspection Considerations

- Temperature
  - Product (Internal)

    Why take internal temps?
    - Chilled products
    - Frozen products
    - Hot Foods



  - Same procedures, except destructive
  - Think…Safety vs. Quality
- *Use which thermometer???*

Thermometers

From the basics to “Wow”…

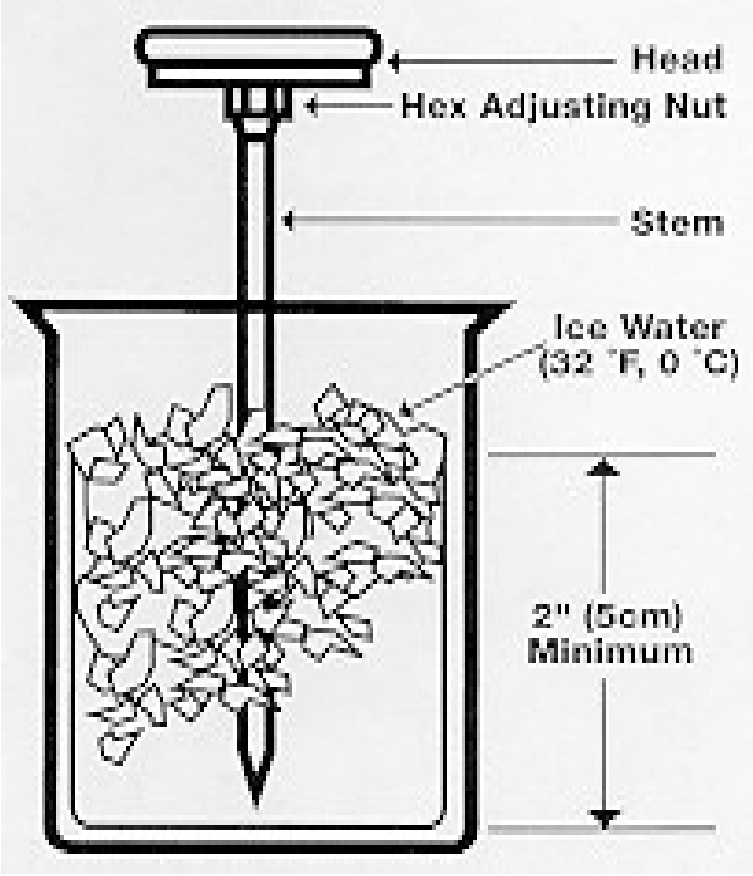
- Bi-metallic
- Thermistor
- Thermocouple
- Infrared
- T-Stick

Bi-metallic

- Sensor consists of 2 metals with different expansion rates coiled together that expand when heated, registering as temperature on the dial face
- Sensor is 2-2½” from tip
- Resulting temp is the average
- Not practical for thin foods
- Requires frequent calibration...

Bi-metallic Calibration Procedures

1. Fill a 2 pint container with 4-6” of crushed ice and water
2. Stir the ice/water solution (should be 32°F)
3. Suspend the bi-metallic and mercury thermometers in ice/water solution
4. Leave in solution till it stabilizes
- Compare both readings
- Adjust bi-metallic thermometer
- Sanitize and air-dry



Thermistors

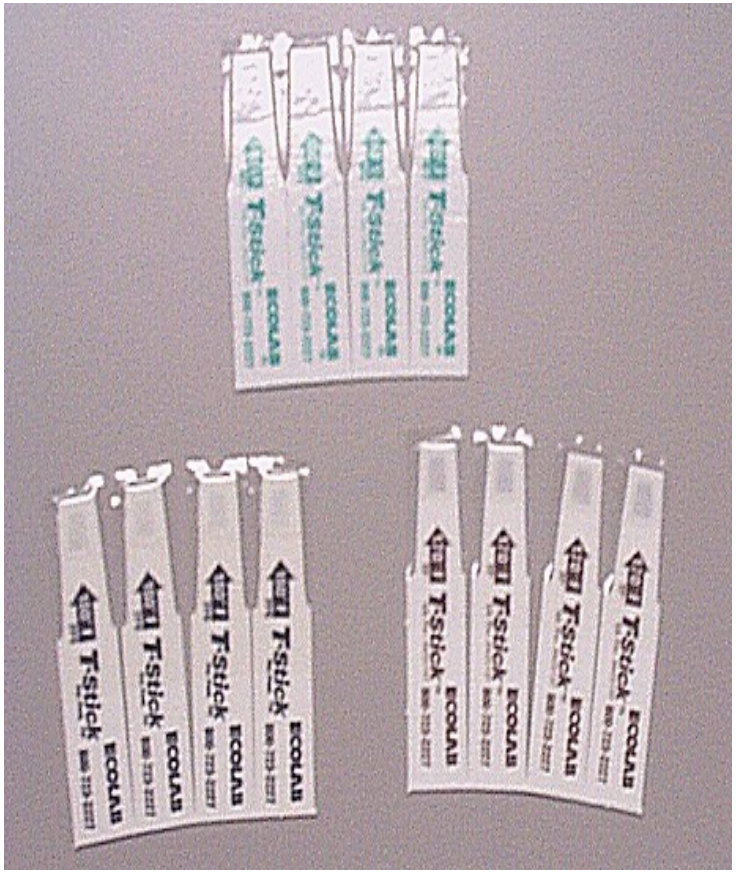
- Contains a ceramic heat-sensitive resistor in the tip that registers varying resistance
- Digital thermometer reads and interprets the resistance as a temp
- Can measure temps of thin foods (½” penetration needed)
- Factory calibrated
- 10 second response time

Thermocouples

- Measures temps at the junction of two fine wires in the probe tip, which produce varying thermoelectric charges
- Can measure very thin foods (only ¼” penetration needed)
- Factory calibrated & on-site calibration

- 2-5 second reading (depending on probe used)

T-Stick



- Disposable, single use, cardboard thermometer with preset temps of 140°F, 160°F, 170°F
- Plastic coated wax on the tip melts (white to black) when the desired temp is reached
- FDA approved materials for contact with food
- Food must be at least ½” thick to be measured
- 5 second response time

Infrared

- Hand held gun detects the amount of radiant energy emitted by an object, displaying the corresponding temperature digitally
- Measures surface temperatures only
- Factory calibrated
- 1 second response time

Non-conformance procedures

- Acceptance / Rejection Decision
  - Unwholesome (safety) - PH
  - Quality - Ordering official
- Paperwork…
  - DD Form 1232, Quality Assurance Representative's Correspondence
  - AAFES Form 6500-20, Subsistence Inspection Report
  - Original copy to ordering official / copy to PH historical file

Summary

- Guidance
- Inspection Considerations
- Thermometers
- Non-conformance Procedures

Pork.
The one you love.
Sask Pork
PATTISON